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<b>TRANSMITTAL FORM</b>  (to be used for all correspondence after initial filing)	Application Number	Patent#: 7,014,883	
	Filing Date	Issued: March 21, 2006	
	First Named Inventor	Ernie R. Silva	
	Art Unit	1762	
	Examiner Name	F. J. Parker	
Total Number of Pages in This Submission	16	Attorney Docket Number	46030/P031D1/10407127

Certificate  
APR 04 2006  
of Correction**ENCLOSURES (Check all that apply)**

<input type="checkbox"/> Fee Transmittal Form <input type="checkbox"/> Fee Attached <input type="checkbox"/> Amendment/Reply <input type="checkbox"/> After Final <input type="checkbox"/> Affidavits/declaration(s) <input type="checkbox"/> Extension of Time Request <input type="checkbox"/> Express Abandonment Request <input type="checkbox"/> Information Disclosure Statement <input type="checkbox"/> Certified Copy of Priority Document(s) <input type="checkbox"/> Reply to Missing Parts/Incomplete Application <input type="checkbox"/> Reply to Missing Parts under 37 CFR 1.52 or 1.53	<input type="checkbox"/> Drawing(s) <input type="checkbox"/> Licensing-related Papers <input type="checkbox"/> Petition <input type="checkbox"/> Petition to Convert to a Provisional Application <input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address <input type="checkbox"/> Terminal Disclaimer <input type="checkbox"/> Request for Refund <input type="checkbox"/> CD, Number of CD(s) _____ <input type="checkbox"/> Landscape Table on CD	<input type="checkbox"/> After Allowance Communication to TC <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences <input type="checkbox"/> Appeal Communication to TC (Appeal Notice, Brief, Reply Brief) <input type="checkbox"/> Proprietary Information <input type="checkbox"/> Status Letter <input checked="" type="checkbox"/> Other Enclosure(s) (please identify below): Certificate of Mailing Certificate of Correction Request for Certificate of Correction (no fee) Amendment After Final Action 1 Return Postcard
<b>Remarks</b>		

**SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT**

Firm Name	FULBRIGHT & JAWORSKI L.L.P.		
Signature			
Printed name	Michael J. Fogarty, III		
Date	March 27, 2006	Reg. No.	42,541

APR - 4 2006



Docket No.:  
46030/P031D1/10407127  
(PATENT)

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Letters Patent of:  
Ernie R. Silva et al.

Patent No.: 7,014,883

Issued: March 21, 2006

For: APPARATUS AND METHOD FOR FORMING  
A COMPOSITE STRUCTURE

**REQUEST FOR CERTIFICATE OF CORRECTION  
PURSUANT TO 37 CFR 1.322**

Attention: Certificate of Correction Branch  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

Upon reviewing the above-identified patent, Patentee noted typographical errors which should be corrected.

In the Claims:

In Claim 1, line number 25, delete the text "from the tool, said" and replace with --on the tool; and removing the composite structure from the tool, said--.

In Claim 12, line number 17, delete the text "and".

In Claim 13, line number 22, delete the text "is".

The Amendment After Final Action (a copy is enclosed herewith) sent in response to Office Action dated July 11, 2005, reflects the above mentioned amendments to the given claims. The errors were not in the application as filed by applicant, rather, incorrectly transcribed to the Letters Patent; accordingly no fee is required.

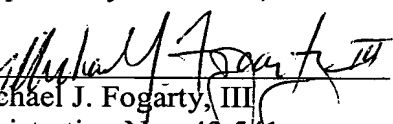
APR - 4 2006

Transmitted herewith is a proposed Certificate of Correction effecting such amendment. Patentee respectfully solicits the granting of the requested Certificate of Correction.

Applicant believes no fee is due with this request. However, if a fee is due, please charge our Deposit Account No. 06-2380, under Order No. 46030/P031D1/10407127 from which the undersigned is authorized to draw.

Dated: March 27, 2006

Respectfully submitted,

By   
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**UNITED STATES PATENT AND TRADEMARK OFFICE  
CERTIFICATE OF CORRECTION**

Page 1 of 1

PATENT NO. : 7,014,883  
APPLICATION NO. : 10/757,761  
ISSUE DATE : March 21, 2006  
INVENTOR(S) : Ernie R. Silva et al.

It is certified that an error appears or errors appear in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

In Claim 1, line number 25, delete the text "from the tool, said" and replace with --on the tool; and removing the composite structure from the tool, said--.

In Claim 12, line number 17, delete the text "and".

In Claim 13, line number 22, delete the text "is".

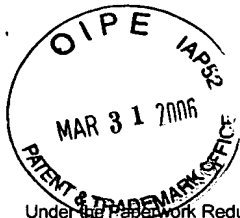
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1

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PTO/SB/92 (09-04)  
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U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Application No. : 10/757,761

Attorney Docket No.: 46030/P031D1/10407127

## Certificate of Mailing under 37 CFR 1.8

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Amendment After Final Action (copy, 11 pages)  
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APR - 4 2006

Docket No.: 46030/P031D1/10407127  
(PATENT)



**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Patent Application of:  
Ernie R. Silva et al.

Application No.: 10/757,761

Confirmation No.: 4242

Filed: January 14, 2004

Art Unit: 1762

For: APPARATUS AND METHOD FOR FORMING  
A COMPOSITE STRUCTURE

Examiner: F. J. Parker

**AMENDMENT AFTER FINAL ACTION (37 C.F.R. SECTION 1.116)**

MS AF  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**COPY**

Dear Sir:

**INTRODUCTORY COMMENTS**

In response to the Office Action dated July 11, 2005, finally rejecting claims 1-11 and 13-23, please amend the above-identified U.S. patent application as follows:

**Amendments to the Claims** are reflected in the listing of claims which begins on page 2 of this paper.

**Remarks/Arguments** begin on page 5 of this paper.

**AMENDMENTS TO THE CLAIMS**

1. (Currently Amended) A method for forming a composite structure, the method comprising:

applying a surfactant solution to a surface of a tool and drying said surfactant solution to form a surfactant-coated surface, wherein said tool comprises composite material;

applying a primer to said surfactant-coated surface of a tool;

applying a coating to the primer;

curing the primer and coating applied to the tool to form a durable coating; and

forming the composite structure on the tool; and  
removing the composite structure from the tool, said durable coating remaining substantially bound to said tool.

2. (Original) The method of Claim 1 wherein the tool is a metallic material.

3. (Original) The method of Claim 1 wherein the tool is a composite material.

4. (Original) The method of Claim 1 wherein the primer is a powdered primer.

5. (Original) The method of Claim 1 wherein the primer is a nylon powder primer.

6. (Original) The method of Claim 1 wherein the coating is a powdered fluorinated organic compound.

7. (Original) The method of Claim 1 wherein at least one of the applying steps comprises electrostatic powder spraying.

8. (Original) The method of Claim 1 wherein the forming step comprises placing the tool in an oven and heating the oven.

9. (Original) The method of Claim 1 further comprising the step of cleaning the surface of the tool with a solvent before applying the primer.

10. (Original) The method of Claim 9 wherein the solvent is an isopropyl alcohol.

11. (Original) The method of Claim 1 further comprising the step of coupling tape to a peripheral portion of the surface before applying the primer.

12. (Canceled)

13. (Currently Amended) A method for forming a composite structure, the method comprising:

cleaning a surface of a tool, the surface having a peripheral portion, wherein said tool comprises composite material;

covering the peripheral portion;

applying a surfactant solution to the uncovered portion of the surface and drying said surfactant solution to form a surfactant-coated uncovered surface;

applying a primer to the surfactant-coated uncovered portion of the surface;

applying a coating to the primer;

curing the primer and coating applied to the tool to form a durable coating on said tool; and

forming the composite structure on the tool; and

removing the composite structure from the tool, said durable coating remaining substantially bound to said tool.

14. (Currently Amended) The method of Claim 13 wherein the tool is comprises a steel mold for forming composite structures.

15. (Original) The method of Claim 13 wherein the tool is a composite mold for forming composite structures.

16. (Original) The method of Claim 13 wherein the primer is a powdered primer.

17. (Original) The method of Claim 13 wherein the primer is a nylon powder primer.

18. (Original) The method of Claim 13 wherein the coating is a powdered fluorinated organic compound.



19. (Original) The method of Claim 13 wherein at least one of the applying steps comprises electrostatic powder spraying.

20. (Original) The method of Claim 13 wherein the forming step comprises placing the tool in an oven and heating the oven to at least 450 degrees Fahrenheit.

21. (Original) The method of Claim 13 wherein the cleaning step comprises applying a solvent to the surface of the tool.

22. (Original) The method of Claim 21 wherein the solvent is an isopropyl alcohol.

23. (Original) The method of Claim 13 wherein the covering step comprises coupling masking tape to the peripheral portion of the surface.

24. (Canceled)

REMARKS

## I. Summary

Claims 1-11 and 13-23 are pending in the application. In the Final Office Action mailed July 11, 2003, claims 1-11 and 13-23 were rejected. Claims 1, 13, and 14 have been amended. No new matter has been added. The issues in the Final Office Action are:

- Claims 1-11 and 13-23 are rejected under 35 U.S.C. § 112, first paragraph.
- Claims 1, 2, 8, 11, 13, 14, 20, and 23 are rejected under 35 U.S.C. § 103(a) as being unpatentable over *Molitor* (U.S. Patent No. 5,827,567) in view of *Chen et al.* (U.S. Patent No. 5,709,949, hereinafter *Chen*), further in view of *Fukui et al.* (U.S. Patent No. 4,673,712, hereinafter *Fukui*).
- Claims 9, 10, 12, 21, 22, and 24 are rejected under 35 U.S.C. § 103(a) as being unpatentable over *Molitor* in view of *Fukui* and further in view of *Chen*.
- Claims 4, 6, 7, 16, 18, and 19 are rejected under 35 U.S.C. § 103(a) as being unpatentable over *Molitor* in view of *Fukui*, further in view of *Chen*, further in view of *Dutheil et al.* (U.S. Patent No. 5,891,515, hereinafter *Dutheil*).
- Claims 5 and 17 are rejected under 35 U.S.C. § 103(a) as being unpatentable over *Molitor* in view of *Fukui*, further in view of *Chen*, and further in view of *Parthasarathy* (U.S. Patent No. 4,104,416).
- Claims 3 and 15 are rejected under 35 U.S.C. § 103(a) as being unpatentable over *Molitor* in view of *Fukui*, further in view of *Chen*, and further in view of *Niskanen et al.* (U.S. Patent No. 5,342,812, hereinafter *Niskanen*).

Applicant respectfully traverses the claim rejections in view of the reasons set forth below and for reasons presented in the Response mailed May 18, 2005.

II. Applicant's Record Under § 713.04 of Telephone Interview with Examiner

Applicant thanks the Examiner for the telephone interview of August 22, 2005, regarding this matter. Applicant respectfully submits the following record of the telephone interview under M.P.E.P. § 713.04. The following persons participated in the interview: Examiner Frederick J. Parker and Applicant's attorney Mark E. Flanigan.

Regarding the claim rejection under 35 U.S.C. § 112, first paragraph, Applicant proposed amending claims 1 and 13 with additional language supported by the specification. Applicant proposed amending claims 1 and 13 with the additional limitation of "wherein said tool comprises composite material."

Regarding the claim rejections under 35 U.S.C. § 103(a), additional language clarifying methods claimed in claims 1 and 13 was proposed.

The Examiner agreed to permit and consider amendments corresponding to the proposals above.

III. Claim Rejections under 35 U.S.C. § 112, first paragraph

Claims 1-11 and 13-23 are rejected under 35 U.S.C. § 112, first paragraph as not being enabled by the specification. Applicant has amended claims 1 and 13 to recite the additional limitation of "wherein said tool comprises composite material." This language is supported by the specification at, for example, page 6, third paragraph and page 9, first paragraph. Applicant respectfully asserts that amended claims 1 and 13 are fully enabled by the specification.

Claims 2-11 and 14-23 depend directly or indirectly from base claims 1 and 13. As shown above, claims 2-11 and 14-23 comprise all limitations of the base claims from which they depend. Applicant respectfully asserts that, in view of the amendment to claims 1 and 13, that claims 2-11 and 14-23 are also fully enabled by the specification. Additionally claim 14 has been amended to correspond with amended claim 13.

In view of the above, Applicant respectfully requests that the Examiner withdraw the rejection of claims 1-11 and 13-23 under 35 U.S.C. § 112, first paragraph.

#### IV. Claim Rejections under 35 U.S.C. § 103(a)

Claims 1-11 and 13-23 have been rejected under 35 U.S.C. § 103(a) as obvious over *Molitor* in combination with various references. Claims 1, 13, and 14 have been amended to recite additional clarifying limitations. These limitations are supported by the specification at, for example, page 3, fourth paragraph, page 7, first paragraph, and page 9, second paragraph. Thus, no new matter has been added.

To establish a prima facie case of obviousness, three basic criteria must be met. *See* M.P.E.P. § 2143. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. Without conceding the first or second criteria, Applicant respectfully asserts that the references do not teach or suggest all the claim limitations.

#### **Claims 1, 2, 8, 11, 13, 14, 20, and 23**

Claims 1, 2, 8, 11, 13, 14, 20, and 23 are rejected under 35 U.S.C. § 103(a) as being unpatentable over *Molitor* in view of *Chen*, further in view of *Fukui*.

Claim 1 recites “applying a primer to said surfactant-coated surface of a tool.” *Molitor* teaches a method of preparing a game ball mold cavity. *See* col. 1, lines 6-7. *Molitor* teaches a mold cavity preparation technique comprising in the first step shot peening or air blasting using an abrasive media. *See Molitor* at col. 1, lines 24-59. “After blasting, the hemispherical opening and land area of the mold cavity are primed.” *See id.* *Molitor* does not teach or suggest applying a surfactant solution before priming. Accordingly, *Molitor* does not teach or suggest at least “applying a primer to said surfactant-coated surface of a tool” as recited in claim 1.

The Examiner states that *Fukui* teaches the use of a mold coating which “prevents sticking of subsequently contacting solid being formed.” *Fukui* teaches a copolymer useful as a “mold release agent, a non-tackifier and a water- and oil-repellant.” See *Fukui* at col. 1, lines 17-21. Applicant respectfully asserts that *Fukui* does not teach or suggest a surfactant to which a primer can be applied. Accordingly, *Fukui* does not teach or suggest at least the above-recited limitation of claim 1.

*Chen* teaches coated fuser members prepared by applying a fluoroelastomer layer to a primer layer. See *Chen* at col. 8, lines 20-55. *Chen* does not teach or suggest applying a primer to a surfactant-coated surface of a tool. Accordingly, *Chen* does not teach or suggest the above-recited limitation of claim 1. Because *Molitor* in view of *Fukui*, further in view of *Chen* does not teach or suggest all limitations of claim 1, claim 1 is not obvious over the cited references.

Claim 13 recites “applying a primer to the surfactant-coated uncovered portion of the surface.” *Molitor* teaches a method of preparing a game ball mold cavity. See col. 1, lines 6-7. *Molitor* teaches a mold cavity preparation technique comprising in the first step shot peening or air blasting using an abrasive media. See *Molitor* at col. 1, lines 24-59. “After blasting, the hemispherical opening and land area of the mold cavity are primed.” See *id.* *Molitor* does not teach or suggest applying a surfactant solution before priming. Accordingly, *Molitor* does not teach or suggest at least “applying a primer to the surfactant-coated uncovered portion of the surface” as recited in claim 13.

The Examiner states that *Fukui* teaches the use of a mold coating which “prevents sticking of subsequently contacting solid being formed.” *Fukui* teaches a copolymer useful as a “mold release agent, a non-tackifier and a water- and oil-repellant.” See *Fukui* at col. 1, lines 17-21. Applicant respectfully asserts that *Fukui* does not teach or suggest a surfactant to which a primer can be applied. Accordingly, *Fukui* does not teach or suggest at least the above-recited limitation of claim 13.

*Chen* teaches coated fuser members prepared by applying a fluoroelastomer layer to a primer layer. See *Chen* at col. 8, lines 20-55. *Chen* does not teach or suggest applying a primer to a surfactant-coated uncovered surface of a tool. Accordingly, *Chen* does not teach

or suggest the above-recited limitation of claim 13. Because *Molitor* in view of *Fukui*, further in view of *Chen* does not teach or suggest all limitations of claim 13, claim 13 is not obvious over the cited references.

Claims 2, 8, 11, 14, 20, and 23 depend directly or indirectly from claims 1 and 13. As such, they comprise all limitations of the base claim from which they depend. As shown above, not all limitations of claims 1 and 13 are taught by the cited references. Accordingly, not all limitations of claims 2, 8, 11, 14, 20, and 23 are taught by the cited references. Accordingly, claims 2, 8, 11, 14, 20, and 23 are not obvious over *Molitor* in view of *Fukui*, further in view of *Chen*. In view of the above, Applicant respectfully requests that the Examiner withdraw the rejection of record and pass claims 1, 2, 8, 11, 13, 14, 20, and 23 to issue.

#### **Claims 9, 10, 12, 21, 22, and 24**

Claims 9, 10, 12, 21, 22, and 24 are rejected under 35 U.S.C. § 103(a) as being unpatentable over *Molitor* in view of *Fukui* and further in view of *Chen*. Applicant respectfully notes that claim 24 was canceled without prejudice in the previous Response dated May 18, 2005.

Claims 9, 10, 12, 21, 22, and 24 depend directly or indirectly from claims 1 and 13. As such, they comprise all limitations of the base claim from which they depend. As shown above, not all limitations of claims 1 and 13 are taught by the cited references. Accordingly, not all limitations of claims 9, 10, 12, 21, 22, and 24 are taught by the cited references. Thus, claims 9, 10, 12, 21, 22, and 24 are not obvious over *Molitor* in view of *Fukui*, further in view of *Chen*. In view of the above, Applicant respectfully requests that the Examiner withdraw the rejection of record and pass claims 9, 10, 12, 21, 22, and 24 to issue.

#### **Claims 4, 6, 7, 16, 18, and 19**

Claims 4, 6, 7, 16, 18, and 19 are rejected under 35 U.S.C. § 103(a) as being unpatentable over *Molitor* in view of *Fukui*, further in view of *Chen*, further in view of *Dutheil*. Claims 4, 6, 7, 16, 18, and 19 depend directly from claims 1 and 13. As such, they comprise all limitations of the base claim from which they depend. As shown above, not all

limitations of claims 1 and 13 are taught by *Molitor* in view of *Fukui*, further in view of *Chen*. *Dutheil* does not cure the deficiencies of those references with respect to claims 1 and 13. *Dutheil* teaches a metal substrate “which may have been subjected beforehand to one or more surface treatments such as alkali degreasing, brushing, shot-blasting, phosphatizing, hot rinsing, etc.”. See *Dutheil* at col. 2, lines 10-14. However, *Dutheil* does not teach or suggest at least the limitation of “applying a primer to said surfactant-coated surface of a tool,” as recited by claim 1, or “applying a primer to the surfactant-coated uncovered portion of the surface” as recited by claim 13. *Molitor* in view of *Fukui*, further in view of *Chen*, further in view of *Dutheil* does not teach or suggest all limitations of claims 1 and 13. Accordingly, the cited references do not teach or suggest all limitations of claims 4, 6, 7, 16, 18, and 19. Thus, claims 4, 6, 7, 16, 18, and 19 are not obvious over *Molitor* in view of *Fukui*, further in view of *Chen*, further in view of *Dutheil*.

#### Claims 5 and 17

Claims 5 and 17 are rejected under 35 U.S.C. § 103(a) as being unpatentable over *Molitor* in view of *Fukui*, further in view of *Chen*, and further in view of *Parthasarathy*. Claims 5 and 17 depend directly from claims 1 and 13. As such, they comprise all limitations of the base claim from which they depend. As shown above, not all limitations of claims 1 and 13 are taught by *Molitor* in view of *Fukui*, further in view of *Chen*. *Parthasarathy* teaches “application of two layers of powder material on a substrate.” See *Parthasarathy* at col. 3, lines 4-5. However, *Parthasarathy* does not teach or suggest at least the limitation of “applying a primer to said surfactant-coated surface of a tool,” as recited by claim 1 or “applying a primer to the surfactant-coated uncovered portion of the surface” as recited by claim 13. *Parthasarathy* does not cure the deficiencies of *Molitor* in view of *Fukui*, further in view of *Chen* with respect to base claims 1 and 13. Accordingly, *Molitor* in view of *Fukui*, further in view of *Chen*, and further in view of *Parthasarathy* does not teach or suggest all limitations of claims 5 and 17. Thus, claims 5 and 17 are not obvious over the cited references.

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**Claims 3 and 15**

Claims 3 and 15 are rejected under 35 U.S.C. § 103(a) as being unpatentable over *Molitor* in view of *Fukui*, further in view of *Chen*, and further in view of *Niskanen*. Claims 3 and 15 depend directly from claims 1 and 13. As such, they comprise all limitations of the base claim from which they depend. As shown above, not all limitations of claims 1 and 13 are taught by *Molitor* in view of *Fukui*, further in view of *Chen*. *Niskanen* teaches composite materials for use as golf club heads. See *Niskanen* at col. 1, lines 10-20. However, *Niskanen* does not teach or suggest at least the limitation of "applying a primer to said surfactant-coated surface of a tool," as recited by claim 1 or "applying a primer to the surfactant-coated uncovered portion of the surface" as recited by claim 13. *Niskanen* does not cure the deficiencies of *Molitor* in view of *Fukui*, further in view of *Chen* with respect to base claims 1 and 13. Accordingly, *Molitor* in view of *Fukui*, further in view of *Chen*, and further in view of *Niskanen* does not teach or suggest all limitations of claims 3 and 15. Thus, claims 3 and 15 are not obvious over the cited references.

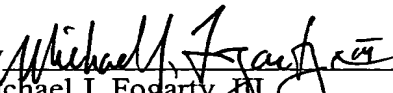
**V. Conclusion**

In view of the above amendment, Applicant believes the pending application is in condition for allowance.

Applicant believes no fee is due with this response. However, if a fee is due, please charge our Deposit Account No. 06-2380, under Order No. 46030/P031D1/10407127 from which the undersigned is authorized to draw.

Dated: September 12, 2005

Respectfully submitted,

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